

FACULTY PROFILE for NACC (2016-2022)

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| Name | Dr. Rekha Garg Solanki | | | Date of Birth: 25/04/1982 | |
| Designation | Assistant Professor Stage (III) | | | Date of holding | 28th June 2017 |
| | | | | Present Post | |
| Name of the Department and School | Physics | | | School of Mathematical and Physical Sciences | |
| Contact Details | Email: gargrekha25@rediffmail.com Sorekha49@gmail.com , rgsolanki@dhsgsu.edu.in | | | Mobile:9329943805, 8770781460 | |
| Additional Responsibility in the university, if any | 1. Member of Departmental Board of Studies from 2019 to 2022. 2. Member of School board of studies from 2019 to 2022. | | | | |
| Educational Qualifications (UG onwards) | M.Sc., M. Phil., Ph. D. | | | | |
| Research Area/Specialization | Semiconductor Thin Films, Nanomaterials and Nanotechnology for photovoltaic and catalytic applications, DFT based computational material science and bio-waste management | | | | |
| Awards/ Honors / Fellowship Conferred (With details thereof) | 1. Gold Medal in M.Sc. from Guru Ghasidas University, Bilaspur (CG). 2. N S S ‘B’ Certificate | | | | |
| Summary of Publications (Number only) | Research Papers | Books | Chapter in Books | Seminars/ Conferences Proceedings | Projects |
| | 08 | - | - | 07 | - |
| Best Five Research Publications | 1. Structural, Optical, and Morphological Properties of CdS Nanoparticles Synthesized using Hydrazine Hydrate as Complexing Agent, <i>Rekha Garg Solanki and P. Rajaram, Nano-Structures & Nano-Objects 12, 157-165 (2017). Citations:18</i> https://doi.org/10.1016/j.nanoso.2017.10.003 . 2. Growth, Characterization, and Estimation of Lattice Strain and Size in CdS Nanoparticles: X-Rays Peak Profile Analysis, <i>Rekha Garg Solanki and P. Rajaram, Indian J. Phys. (2017), 92(5), 595- 603. Citations: 12</i> https://doi.org/10.1007/s12648-017-1134-8 . 3. Electrochemical Growth and Studies of CdZnTe thin films, <i>Rekha G. Solanki, IJPAP Vol.48(02)133-135, February 2010. Citations: 11</i> http://nopr.niscair.res.in/handle/123456789/7243 . | | | | |

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| | <p>4. Theoretical Analysis of XRD Data by X-Ray Peak Profile Analysis for Estimation of lattice Strain and crystallite Size and study of the Effect of Growth Temperature in CdS Nanoparticles, Rekha Garg Solanki and P. Rajaram, Materials today Proceedings, Volume 47, Part 18, 2021, 6384-6388. Citations: 1 https://doi.org/10.1016/j.matpr.2021.08.172.</p> <p>5. Structural and Optical Properties of Hydrazine Hydrate Capped Cadmium Sulphide, Rekha Garg Solanki and P. Rajaram, AIP Conference Proceedings 1953,030018 (2018) published: May 2018, https://doi.org/10.1063/1.5032353. Citations: 1.</p> |
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PUBLICATIONS – 2007 onwards :

International/National Publications (Details of Research Papers) – during 20007-2022

| YEAR | Research Article Details |
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| 2022 | <p>1. Synthesis and characterization of ZnSe nanorods by coprecipitation method, Perna Gupta, pushpanjali Patel, KM Sujata, Rekha Garg solanki Materials today Proceedings, 2022 accepted. https://doi.org/10.1016/j.matpr.2022.05.411.</p> <p>2. Quenching of As-synthesized ZnSe nanorods to ZnSe/ZnO nanoparticles via Air Annealing Perna Gupta, Pushpanjali Patel, KM Sujata, Rekha Garg Solanki, research square, https://doi.org/10.21203/rs.3.rs-1584525/v1. (Available on open access platform)</p> |
| 2021 | <p>3. Theoretical Analysis of XRD Data by X-Ray Peak Profile Analysis for Estimation of lattice Strain and crystallite Size and study of the Effect of Growth Temperature in CdS Nanoparticles, Rekha Garg Solanki and P. Rajaram, Materials today Proceedings, Volume 47, Part 18, 2021, Pages 6384-6388. https://doi.org/10.1016/j.matpr.2021.08.172</p> |
| 2019 | <p>4. Photoluminescence and chromaticity properties of CdSe nanosbeads made by a complexing agent assisted hydrothermal method for LED and laser applications, Rekha Garg Solanki and P. Rajaram, AIP Conference Proceedings 2142, 040017 (2019) published: 29 August 2019 https://doi.org/10.1063/1.5122354.</p> <p>5. Hydrothermal synthesis and photoluminescence Properties of CdSe and CdZnSe nanostructures for lasers and LEDs, Proceedings of the first international conference on advances in nanomaterials and devices for energy and environment (ICAN-2019); Volume 52 (41), Year 2019. Hydrothermal synthesis and photoluminescence Properties of Cd.. INIS (iaea.org).</p> |
| 2018 | <p>6. Structural and Optical Properties of Hydrazine Hydrate Capped Cadmium Sulphide, Rekha Garg Solanki and P. Rajaram, AIP Conference Proceedings 1953,030018 (2018) published: May 2018, https://doi.org/10.1063/1.5032353.</p> |

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| | <p>7. Structural and Optical Properties of CdSe Nanosheets, Rekha Garg Solanki and P. Rajaram, AIP Conference Proceedings 1942, 050104 (2018); published: April 2018. https://doi.org/10.1063/1.5028735.</p> |
| 2017 | <p>8. Structural, Optical, and Morphological Properties of CdS Nanoparticles Synthesized using Hydrazine Hydrate as Complexing Agent, Rekha Garg Solanki and P. Rajaram, Nano-Structures & Nano-Objects 12, 157-165 (2017). https://doi.org/10.1016/j.nanoso.2017.10.003.</p> <p>9. Growth, Characterization, and Estimation of Lattice Strain and Size in CdS Nanoparticles: X-Rays Peak Profile Analysis, Rekha Garg Solanki and P. Rajaram, Indian J. Phys. (2017), 92(5), 595-603 https://doi.org/10.1007/s12648-017-1134-8.</p> <p>10. Two-Step Hydrothermal Synthesis of Nanocrystalline CdS, Rekha Garg Solanki and P. Rajaram, International Journal of Advanced Engineering and Research Development, 4 (7), 118-122 (2017). https://www.researchgate.net/publication/320628485_Two_Step_Hydrothermal_Synthesis_of_Nanocrystalline_CdS.</p> |
| 2016 | <p>11. Synthesis and Characterization of CdSe Nanoparticles by Two Step Chemical Method, Rekha Garg Solanki and P. Rajaram, E-proceeding of DAE-BRNS 6th Interdisciplinary Symposium on Materials Chemistry page no. 275-277, December 6-10, 2016, Mumbai, India. https://www.researchgate.net/publication/362667903_Synthesis_and_Characterization_of_CdSe_Nanoparticles_by_Two_Step_Chemical_Method</p> |
| 2015 | <p>12. Study of Ground State Parameters and Pressure-Induced Phase Transition in Cerium Bismuthide”, Rekha Garg Solanki, Anurag Shrivastava, and P. Rajaram, Advanced Science Letters, Vol. 21 (2015) 2915-2917. https://doi.org/10.1166/asl.2015.6368.</p> <p>13. Pressure-Induced Phase transition in Platinum Hydride”, Rahul Kumar Thakur, Anurag Shrivastava, Lalit Mohan, Pankaj Mishra, Ranjeet Brajpuriya and Rekha Garg Solanki, Advanced Science Letters, Vol. 21 (2015) 2865- 2867. https://doi.org/10.1166/asl.2015.6345.</p> |
| 2010 | <p>14. Electrochemical Growth and Studies of CdZnTe thin films, Rekha G. Solanki, IJPAP Vol.48(02)133-135, February 2010, http://nopr.niscair.res.in/handle/123456789/7243.</p> |
| 2009 | <p>15. Structural and Compositional studies of CdTe thin films, Rekha G. Solanki and P. Rajaram, Madhya Bharti – A journal of Natural Sciences 55, 2009 page (25-29). ISSN-0972-7434. https://www.researchgate.net/publication/362668257_structural_and_compositional_studies_of_electrodeposited_CdTe_thin_films.</p> |

| Invited lectures in various International/National Conferences, Webinars and other Organizations till 2022 | |
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| 2022 | <ol style="list-style-type: none"> 1. “analysis of obstacles of scientific temper on the basis of mythological TV shows and films (TV & Film Media)” in two days ‘International webinar on cultural and linguistic hurdles in achievement of Scientific temper’ July 30th -31st 2022, organized by Department of anthropology, Montclair state University, New Jersey, USA. 2. Invited as resource person for evaluation of presentations of participants in 10th International conference drift and research shift in Pharm-Ag, Engineering and Science (DRSPAES) held on 27th-28th February, 2022 at Swami Vivekananda University, Sagar (M.P). 3. Invited as resource person for Evaluation of micro-teaching by the participants on 28/07/2022 in refresher course on Recent data analysis methods during the period 20/07/2022 to 02/08/2022 organised by UGC-Human Resource Development Centre Dr. H S Gour University, Sagar (M.P.). |
| 2021 | <ol style="list-style-type: none"> 4. “Interdisciplinary Teaching and Learning” in three days National E-Workshop on” Teaching Skills Development” organised by Govt. College Patharia, Dist. Damoh (MP) from 22nd March to 24th March 2021. 5. “Effect of Ultraviolet rays and its consequences on human life” in national webinar on 24 th February 2021 organised by Department of Physics, Govt. College Harsud, Khandwa (MP). 6. “II-VIth Transition Metal Chalcogenide Materials (TMCs) for Energy Detection, Conversion and Storage applications” in International conference on Diverse Emerging materials and their Applications (ICDEMA-2021) during 14th-15th March, 2021 at Department of Physics, University of Lucknow, Lucknow, (U.P.). 7. Invited for evaluation of the presentations of Research Proposals by the participants on 1/03/2021 in 4th Faculty development Programme 27/01/2021 to 02/03/2021 organised by UGC-Human Resource Development Centre Dr. H S Gour University, Sagar (M.P.) 8. ‘Importance of Transition metal Chalcogenides for Energy conversion, storage and Detection’ in 9th International conference 2021 Current Research Trends in Pharmacy, Engineering, Agriculture, Science, technology and management during Pandemic held on 27th-28th February, 2021 at Swami Vivekananda University, Sagar (M.P). 9. Invited for the Evaluation of the presentations of Research proposals by the participants on 1/03/2021 in 4th Faculty development Programme 27/01/2021 to 02/03/2021 organised by UGC-Human Resource Development Centre Dr. H S Gour University, Sagar (M.P.) |
| 2020 | 10. “नई राष्ट्रीय शिक्षा नीति 2020 के संदर्भ में स्कूली शिक्षा की स्थिति” All India Save Education Society (AISE) Madhya Pradesh on 26 September 2020 |

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| | <p>11. "नई राष्ट्रीय शिक्षा नीति 2020 के संदर्भ में उच्च शिक्षा एब ऑनलाइन शिक्षा की प्रासंगिकता" All India Save Education Society (AISE) Madhya Pradesh on 21 November 2020</p> <p>12. CdS Nanoparticles Synthesis and Characterization: the Effect of Growth Temperatures on Structural, Optical and Morphological Properties in 8th International conference on Innovative research practices in Pharma, Science, Management, Agriculture and Technology (IC-IRPPSMAT), held on 27th-28th February, 2020 at Swami Vivekananda University, Sagar (M.P.).</p> <p>13. "Scientific approach for Social Science problems" at Academic Staff College, Dr. H S Gour University, Sagar (M.P.) February 4, 2020.</p> |
| 2019 | 14. "Stephen Hawkins: Scientific Legacy" at Remedial Coaching Centre, Dr. H S Gour University, Sagar (M.P.), January 8, 2019. |
| 2018 | 15. 'Waste water management' in National Seminar Sponsored by MPCST, Bhopal (M.P.) 2018 , at Infinity Management & Engineering College Sagar (M.P.). |
| International Seminar/Conference/Workshops/Webinars Organized during (2016-2022) | |
| 2022 | <p>1. International Conference on Current Trends in Advanced Materials and their Applications for Societal Development (ICTAMASD-2022) organized during March 8-10, 2022 (ONLINE Mode)</p> <p>http://www.dhsgsu.edu.in/index.php/en/events-all/2351-testing.</p> |
| 2019 | <p>2. 2 days International Webinar on "Advanced Materials and their Application" during 16-17 June 2020 (ONLINE Mode).</p> <p>https://us02web.zoom.us/j/81041529840?pwd=VVhjb2t1a1FGRIlZWm1TZW9ER2k1dz09</p> |
| Paper presented in National/International Conferences during (2007-2022) | |
| 2022 | <p>1. Investigation of the structural and optical properties of Copper selenium nanoparticles, in the virtual National Seminar on Advanced materials and characterization-2022, organised by material Research Lab., Department of Physics, Govt. Nagarjun PG college of Science Raipur (CG) during 26-27 August 2022.</p> <p>2. The first Principle study:electronic and optical properties of Bi₂S₃ in the virtual National Seminar on Advanced materials and characterization-2022, organised by material Research Lab., Department of Physics, Govt. Nagarjun PG college of Science Raipur (CG) during 26-27 August 2022.</p> <p>3. 'Synthesis of ZnSe entities by co-precipitation method and their characterization' in the virtual National Seminar on Advanced materials and characterization-2022, organised by material Research Lab., Department of Physics, Govt. Nagarjun PG college of Science Raipur (CG) during 26-27 August 2022.</p> <p>4. 'Structural and Optical properties of Copper Selenide nanolayered tiles' in the 2022</p> |

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| | <p>second Global conference on Recent Advances in Sustainable Materials (GC-RASM2022) organised by A J institute of Engineering & Technology, Karnatka, India during 28-29th, July 2022.</p> <p>5. ‘Facile synthesis and characterization of ZnSe Nanoparticles’ in the 2022 second Global conference on Recent Advances in Sustainable Materials (GC-RASM2022) organised by A J institute of Engineering & Technology, Karnatka, India during 28-29th, July 2022.</p> <p>6. ‘Synthesis and characterization of ZnSe Nanorods by co-precipitation method’ in international conference on recent advances in engineering materials (ICREAM2022) organised by Alva’s institute of engineering and technology, Moodbidri, karnatak during 3-5, March 2022.</p> <p>7. ‘Review study of Structural and optical properties of Bsmuth sulphide for thermoelectric applications’ K M Sujata, Prerna Gupta, Pushpanjali patel and R G Solanki, in International Conference on Current Trends in Advanced Materials and their Applications for Societal Development (ICTAMASD-2022) organised by Department of Physics, dr H S Gour University, Sagar (MP) (ONLINE) during March 8-10, 2022.</p> <p>8. ‘Structural, Optical and Morphological Properties of ZnSe nanorods’ Prerna Gupta, K M Sujata, Pushpanjali patel and R G Solanki in International Conference on Current Trends in Advanced Materials and their Applications for Societal Development (ICTAMASD-2022) organised by Department of Physics, dr H S Gour University, Sagar (MP) (ONLINE) during March 8-10, 2022</p> <p>9. ‘Solvothermal Synthesis of Copper selenide nanolayered Sheets’ Pushpanjali patel, K M Sujata, Prerna Gupta, and R G Solanki in International Conference on Current Trends in Advanced Materials and their Applications for Societal Development (ICTAMASD-2022) organised by Department of Physics, dr H S Gour University, Sagar (MP) (ONLINE) during March 8-10, 2022.</p> |
| 2021 | <p>10. Composition dependent structural and Morphological Properties of Copper Selenide nanoparticles”, Pushpanjali patel, Prerna Gupta, K M Sujata, and R G Solanki in 9th International conference 2021 Current Research Trends in Pharmacy, Engineering, Agriculture, Science, technology and management during Pandemic held on 27th-28th February, 2021 at Swami Vivekananda University, Sagar (M.P).</p> <p>11. Study of the structural and Optical properties of Busmuth Selenide for thermoelectric applications”, KM Sujata, Prerna Gupta, Pushpanjali patel and R G Solanki in 9th International conference 2021 Current Research Trends in Pharmacy, Engineering, Agriculture, Science, technology and management during Pandemic held on 27th-28th February, 2021 at Swami Vivekananda University, Sagar (M.P).</p> <p>12. “Comparative analysis of chemical synthesis methods: search of a suitable cost effective method for ZnSe Nanoparticles”, Prerna Gupta, K M Sujata, Pushpanjali patel</p> |

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| | and R G Solanki in 9 th International conference 2021 Current Research Trends in Pharmacy, Engineering, Agriculture, Science, technology and management during Pandemic held on 27 th -28 th February, 2021 at SVN University, Sagar (M.P). |
| 2020 | <p>13. “Study of corrosion inhibitor properties of biowaste garlic peels as green corrosion inhibitor”, Rekha Garg Solanki in 107th Indian Science Congress (ISC-2020) held at University of Agricultural Sciences Bangalore, during 3-7 January, 2020.</p> <p>14. Woman Science Congress of 107th Indian Science Congress (ISC-2020) Rekha Garg Solanki and Surya Prakash held at University of Agricultural Sciences Bangalore, during 5-6 January, 2020.</p> |
| 2019 | 15. “Photoluminescence and Chromaticity Properties of CdSe Nanobeads Made by a complexing agent assisted Hydrothermal Method for LEDs and Laser Applications” in international conference on Advances in Basic Sciences (ICABS19) at GDC Memorial College, Bahal (Bhiwani) Haryana), February 7-9, 2019. |
| 2018 | <p>16. “Investigations of the effect of complexing agents on the properties of hydrothermally synthesized cadmium selenide nanocrystals” International Conference on Nanomaterials: Initiatives & Applications, at School of Studies in Environmental Chemistry and Institute of Engineering, Jiwaji University, Gwalior (M.P.), March, 9-11, 2018.</p> <p>17. ‘ Growth and characterization of CdS & CdSe nanoparticles’ ’XX- National Seminar on Ferroelectrics and Dielectrics (NSFD-2018) at Department of Physics, Guru Ghasidas University, Bilaspur (C.G.) December 14-16, 2018.</p> <p>18. Waste water Management in National Seminar Sponsored by MPCST, Bhopal (M.P.) at Infinity Management & Engineering College Sagar (M.P.) in 2018.</p> |
| 2017 | <p>19. “Growth and Characterization of CdS nanoparticles”, Rekha Garg Solanki and P Rajaram in 104th Indian Science Congress held at S V University Tirupati, during 3-7 January, 2017.</p> <p>20. “Structural and Optical properties of Hydrazine Hydrate capped Cadmium Sulphide”, Rekha Garg Solanki and P Rajaram, presented in International conference on Recent Trends in Chemical Sciences (ICRCS-2017) held at Govt. Engineering College Bikaner, 12-13 January, 2017.</p> <p>21. “Synthesis of Cadmium Chalcogenide (CdE, E= S, Se) Nanoparticles by hydrothermal process in presence of Hydrazine hydrate”, Rekha Garg Solanki and P Rajaram, International Conference on Nanotechnology: Ideas, Innovations and Initiatives (ICN:3I-2017), 6-8 December 2017, IIT Roorkee.</p> <p>22. “Optical properties of electrodeposited CdTe thin films”, Rekha Garg Solanki and P Rajaram, 17th International Conference on Thin Films (ICTF 2017), 13-17 November 2017 held at CSIR- National Physical Laboratory, New Delhi.</p> |

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| 2016 | <p>23. “Investigation of the Impact of Crystalline Defects and Size on X-Ray Line Broadening: A Phenomenological Approach for Hexagonal CdS Nanoparticles”, 32nd Madhya Pradesh Science festival, February 28-29, 2016, MP Council of Science and Technology, Vigyan Bhawan, Nehru Nagar Bhopal (MP).</p> <p>24. “Estimation of lattice Strain in CdS nanoparticles by x-ray peak broadening analysis”, National conference on emerging trends in engineering and Science, May 16-17, 2016 Institute of engineering and School of studies in Environmental Chemistry, Jiwaji university, Gwalior.</p> <p>25. “Study of the Effect of Growth Temperature on Structural and Optical Properties of CdS Nanoparticles”, Rekha Garg Solanki and P Rajaram, presented in a seminar held at Jiwaji University, Gwalior during 29-30 November, 2016.</p> <p>26. “Synthesis and characterization of CdSe nanoparticles by two step chemical method”, Rekha Garg Solanki and P Rajaram, presented in 6th interdisciplinary Symposium on Materials Chemistry (ISMC-2016) held at Bhabha Atomic Research centre, Mumbai, 6-10 December, 2016.</p> <p>27. Theoretical analysis of XRD data by X-ray peak profile analysis for estimation of lattice strain and size in CdS nanoparticles”, Rekha Garg Solanki and P Rajaram, presented in 4th International workshop/conference on computational condensed matter Physics and material Science (IWCCMP-2016), 18-20 November 2016, held at ABV-IIITM, Gwalior (M.P.)</p> |
| | <p>28. Optical and Thermal Properties of Chemically Synthesized CdSe”, 102th Indian Science congress-2015 (ISC-2015) held on 3rd-7th January, 2015 at University of Mumbai, Mumbai.</p> |
| 2014 | <p>29. Lecture delivered on “Study of Annealing effect on Structural Properties of CdTe Thin Films”, in International conference on Energy Environment and Life Sciences for Sustainable Future, held on 28th February – 1st March 2014 at Swami Vivekananda University, Sagar (M.P).</p> <p>30. “Pressure Induced Phase transition in CeBi”, Rekha Garg Solanki, P Rajaram and Anurag Shrivastava, in International E-workshop /Conference on Computational Condensed Matter Physics & Material Science (IWCCMP-2014), 25-30th November, 2014, Atal Vihari Bajpai Institute of Information Technology and management (IIITM), Gwalior (M.P.).</p> |
| 2013 | <p>31. Study of morphological & structural properties of cadmium telluride thin films” International E-Workshop on Computational Condensed Matter Physics & Material Science (IWCCMP-2013), 27-29 November, 2013 held at Atal Vihari Bajpai Institute of Information Technology and management (IIITM), Gwalior (M.P.)</p> |

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| 2011 | 32. Growth and Morphological and compositional Studies of CdZnTe Thin Films ", Indian Science congress-2011 (ISC-2011) held on 3 rd -7 th January, 2011 at SRM University, Chennai. |
| 2009 | 33. Synthesis and Structural Studies of Rare Earth Substituted Strontium Magnetite ", National Symposium of Laser and Spectroscopy-2009 held on 27 th -28 th February, 2009 at Department of Physics, Dr H S Gour University, Sagar. 34. "Band gap Study of Electrochemically Grown CdTe thin films" , National conference "NCSSI-2009" held on 7-9 December 2009, at Department of Physics, Dr H S Gour University, Sagar. |
| 2008 | 35. Preparation and Characterization of Cadmium Telluride Thin Films ", National Science Day-2008, Dr H S Gour University, Sagar held on 26 th February, 2008. |
| 2007 | 36. "Structural and compositional Studies of CdZnTe Thin Films" , in national conference on Shanti Swarup Bhatnagar Award held on (8-10 March 2007) at Devi Ahilya Vishwavidyalaya, Indore. 37. Growth and characterization of CdTe and CdZnTe thin Films, presented in Technovision-2007: A national level conference, October 26 th and 27 th , 2007 at Bhilai 38. Structural and compositional Studies of CdTe Thin Films ", Rekha Garg Solanki and P Rajaram, Current Trends In Physics (CTP-2K7), Govt. M.L.B. Girls P.G. College, Bhopal, 1 st and 2 nd March 2007. |
| Faculty Development Programs/ Short term Course/ Training Programs during (2007 - 2022) | |
| 2021 | 1. Short Term Course on Use of MATLAB ' organised by HRDC, Dr H S Gour University, Sagar (M.P.) from 12 June to 21 June, 2021. 2. Faculty Training Program on <u>Recent Trends in Physics of Engineering Materials</u> during 7 to 12 June, 2021 Deenbandhu Chhotu Ram University of Science & Technology, Murthal Sonapat, Haryana, India. 3. '10-days E-National Workshop on Yoga & Corona Magement and the international Yoga day Celebration-2021' organised by Department of Yoga Education, , Dr H S Gour University, Sagar (M.P.) from 12 June to 21 June, 2021 . |
| 2020 | 4. Faculty Development Programme on SCILAB during 22nd May -2nd June 2020 organised by A.N. College Patna in association with IIT Bombay through ICT MHRD Govt. Of India 5. Faculty Development Programme on LATEX and XFIG during 11/05/2020 - 17/05/2020 organised by A.N. college Patna in association with IIT Bombay IQAC, ICT MHRD, Govt. of India. |

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| 2019 | <p>6. Refresher course on “Modern Spectroscopy techniques and applications” from 7/01/2019 - 27/01/2019 at Academic Staff College, Dr. H.S. Gour University, Sagar (M.P.).</p> <p>7. One Day Workshop on Internal quality assurance cell (IQAC), 4 February, 2019 Dr H S Gour University, Sagar (M.P.)</p> |
| 2018 | <p>8. “Induction cum Training Programme on MOOC Development” at Educational Multimedia Research Centre, Dr. H S Gour University, Sagar (M.P.), 06th -07th September, 2018.</p> <p>9. Short term course on “MOOC and E-content Development, from 17/09/ 2018 to 19/09/2018 at Academic Staff College, Dr H S Gour Central University, Sagar (M.P.).</p> |
| 2017 | 10. ‘Pre-conference workshop on Thin Film Solar Cells, 17 th International Conference on Thin Films (ICTF 2017), 13 November 2017, CSIR- National Physical Laboratory, New Delhi (2017). |
| 2016 | 11. A GIAN course on “X-ray Structure Determination” 13-26, June 2016, Jiwaji University, Gwalior (M.P.). |
| 2012 | <p>12. One week workshop “WONAMA-2012” Workop on Nano and Advanced Materials and their Applications, 10-16 April, 2012, Banaras Hindu University, Varanasi (U.P.)</p> <p>13. Orientation course from 7/05/2012 – 02/06/2012 at Academic Staff College, RDVV, Jabalpur.</p> |
| 2010. | 14. Refresher course in Physics from 4/02/2010 - 24/02/2010 at Academic Staff College, DAVV, Indore. |

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| No. of Ph.D. Scholars (working): | 4 |
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Memberships in Academic Bodies

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| 1 | Life member Madhya Bharti: A Journal of Physical and Natural Sciences from 2007 |
| 2 | Life member of Solid State Ionics Society of India (SSISI) from 2009 |
| 3 | Life member Indian laser and Spectroscopy Society (LASSI) from 2012 |
| 4 | Life member Indian Science Congress Association (ISCA) from 2010 |

Other Academic Achievements : Membership of the Board of Studies/School Board / Academic Council/ Executive Council (Within/ outside the university) and community work

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| 1. | Invited as Subject Expert in the Interview Board of Army Public School, Sagar (M.P.) March 2020. |
| 2. | Invited as Subject Expert in the Interview Board of Uttar Pradesh Madhyamic Siksha Seva Chayan Board, Prayagraj, 22 to 25 February 2019. |
| 3. | Invited as Subject Expert in the Interview Board of Army Public School, Sagar (M.P.) 29 th February 2019. |

| Participation in international/national webinars/ conferences 2016-2022 | |
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| 2022 | 1. Participated in national webinar on Metal Oxide Nanomaterials for Sensing Applications; some experimental results.” organized by Department of Physics, Dr. Harisingh Gour Vishwavidhyalya Sagar [MP] on Feb 28, 2022 through online mode. |
| 2021 | 2. Participated in International Conference on Material Sciences and Applied Physics (ICMSAP–2021), 22–24 November 2021 Organized by Department of Physics, Pachhunga University College Mizoram University, Aizawl, India 3. Participated in international webinar on cultural and linguistic hurdles in the achievement of scientific temper July 30-31, 2021 organized by organized by department of Anthropology, Montclair State University, New Jersey, USA. |
| 2020 | 4. Participated in International conference on ‘Engineering Smart Materials in applied Chemistry (ESMAC- 2020) 10-12 August 2021, organized by Department of Chemistry, School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar (Odisha). 5. Participated in National webinar on Dialogue with Baba Saheb “A Critical Reflection on Social Science Discourse” 12-14 April, 2020.organized by Teaching Learning Centre for Social Science (TLCSS), Doctor Harisingh Gour Vishwavidyalaya (A Central University),, under the aegis of Pandit Madan Mohan Malaviya National Mission of Teacher and Teaching (PMMMNMTT), MHRD,,New Delhi 6. Participated in International webinar on “Mathematical Modeling in Biological Systems” 5-6 June 2020 organized by the Department of Mathematics and Statistics, Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P. - 2020) 7. International webinar on Revisiting the Idea of Teacher and teaching in the virtual space syn and post covid-19: Indegenous narratives & learning from Within 28-29 May, 2020 organized by the teaching learning centre for social science (TLCSS), Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.). 8. One day webinar on Indian knowledge tradition and Modern Science , 5 May 2020, organised by Centre for Indegenous knowledge, Doctor Harisingh Gour Vishwavidyalaya, Sagar (M.P.). |
| 2017 | 9. Participated in National webinar on “World Environment Day” 5 June,2017 organized by the School of Studies in Environmental Science (IGAEERE), Jiwaji University, Gwalior |
| 2014 | 10. One Day Workshop on ‘Nuclear Magnetic Resonance spectroscopy and its applications in Physics Chemistry and Biology , 16 February, 2014, Dr H S Gour University, Sagar (M.P.). |
| 2013 | 11. National Conference on Solid State Chemistry and Allied Areas-2013 held on 15 th -17 th February, 2013 at department of Chemistry, Dr H S Gour University, Sagar (M.P.). |
| 2003 | 12. Nuclear science centre NSC acquaintance program 2003 , School of pure and applied physics, Guru Ghasidas University, Bilaspur CG. |
| Others | |

1. Certificate of Excellence in Indian Science Congress Quiz-2020 of CSIR, New Delhi.
2. **Member** of counseling committee of MSc I Semester Physics 2019
3. **Convener** of Cultural and Extracurricular activities committee 2019 -2022.
4. **In-charge** of B.Sc. I & II Semester Lab. during 2018, 2019.
5. **Member** of DPGC old course 2019.
6. **Nominated member** of DRC of computer science 2019.
7. **In-charge** of B.Sc. V & VI Semester Lab. during 2020, 2021
8. **Member** of physical verification committee of Dean School of SMPS 2018, 2019, 2020, 2021.
9. **Member** of stock verification committee of Remedial Coaching Centre 2018, 2019.
10. **Member RAC** of pre-submission seminar of Mr. Prakash Narayan PhD scholar Department of Mathematics & Statistics. 2019
11. **Taught in Remedial Coaching** Centre during 2014 and 2018, 2021.
12. **Member of DPGC** during 2017.
13. Appointed Judge for evaluation of speech competition of the Department 2017.
14. **Member** of departmental Discipline Committee 2017
15. **Convener of M.Sc. seminar Committee** during 2017.
16. **In-charge** of B.Sc. I & II Semester Lab. during 2017.
17. **Member of Tabulation committee** of main / Supplementary/Semester Examination for academic session 2010-11 and 2011-12
18. **In-charge Laboratory** of B.Sc. III Semester lab during 2009-10.
19. **Judge of the Departmental Speech competition of UG & PG** students during 2017.
20. **Member** of Evaluation work related to B.Ed of session 2007-08.
21. **Member** of Youth festival organizing committee 2007-2012.

Declaration:

I hereby declare that above information furnished by me is true to the Best of my Knowledge.



Date: 25/08/2022

Place: Sagar

Dr. REKHA GARG SOLANKI

Assistant Professor,

Department of Physics

Dr H S Gour University, Sagar (M.P.)